

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

Approved for use through xx/xx/200x. OMB 0651-00xx
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

Analog. 7020

I hereby certify that this paper
(along with any paper referred to as being attached or enclosed)
is being deposited with the United States Patent and Trademark Office,
via EFS-Web on the date shown below.

on

11-13-06

Signature

Elizabeth M. Ball

Typed or printed
name

Elizabeth M. Ball

Application Number

10/715,629

Filed

11/17/2003

First Named Inventor

Frederic Boutaud

Art Unit

2181

Examiner

Vincent Lai

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒

attorney or agent of record.

Registration number 33,298

☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34

Matthew E. Connors

Signature

Matthew E. Connors

Typed or printed name

(617)426-9180, Ext. 112

Telephone number

11/13/06

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☐

*Total of forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Arguments to be Considered by Pre-Appeal Brief Conference Panel

I. Rejection under 35 U.S.C. §102(b)

Claims 1-14 have been rejected under 35 U.S.C. §102(b) as being anticipated by Morley (US-A-4,276,594). This rejection under 35 U.S.C. §102(b) is respectfully traversed.

A. Independent Claim 1

The Examiner alleges that Morley discloses determining if the fetched program instruction would require three unified memory accesses during a single instruction cycle. The Examiner points to column 58, lines 17-20, of Morley to support this allegation. Column 58, lines 17-20, states, “The 6800 accesses this RAM during the PHΦ of the MIO cycle. During serial I/O, this time is used to fetch/store characters and update pointers. For parallel I/O, this is used to fetch parameters for the PIA.”

Contrary to the Examiner’s position, this passage of Morley fails to discuss or disclose any determination with respect to the number of unified memory accesses that would be required during a single instruction cycle. At column 58, lines 17-20, Morley teaches that the RAM includes a parallel I/O port and a serial I/O port. Moreover, Morley teaches that the RAM is access through the Serial I/O and the Parallel I/O to fetch data from the memory. Notwithstanding the use of both the Serial I/O and the Parallel I/O to fetch data from the memory, Morley fails to teach determining if the fetched program instruction would require three unified memory accesses during a single instruction cycle for proper execution of the fetched program instruction since only two fetches are discussed.

In response to this argument, the Examiner states that it is the Examiner’s interpretation of the teachings of Morley that “the number of unified access [sic] **can be** determined and three unified accesses **is** [sic] **possible**.” [Emphasis added.] The Examiner further states, “the system [of Morley] has the capability to perform a determination **if** a request for a determination is made.” [Emphasis added.] Notwithstanding these assertions, the Examiner has failed to identify any passages in Morley to support the Examiner’s allegations.

In other words, absent any specific passages of in Morley that teach making a request to determine the number of unified memory accesses that would be required during a single instruction cycle and follow-up determination, the Examiner’s assertions are mere conjecture of what Morley could possibly teach as the Examiner has failed to provide any specific evidence to the contrary.

The Examiner also alleges that Morley discloses accessing the unified memory a first time, during the instruction cycle associated with the fetched program instruction, with a dummy access and points to column 58, lines 17-20, of Morley to support the allegation. Contrary to the Examiner' position, this passage of Morley fails to discuss or disclose any type of dummy access of the unified memory. Thus, this passage of Morley cannot provide any basis for a finding of anticipation to the limitation corresponding to accessing the unified memory a first time, during the instruction cycle associated with the fetched program instruction, with a dummy access of independent claim 1.

Lastly, the Examiner alleges that Morley discloses accessing the unified memory a second time, during the instruction cycle associated with the fetched program instruction, with a data access and points to Figure 28 to support the allegation. With respect to Figure 28, the read operation illustrates that during the PH Φ of the MIO cycle, the data from the memory is accessed and placed on the bus; during the PH1 of the MIO cycle, the data sits on the bus; and during the PH2 of the MIO cycle, the data on the bus is uploaded or read. Thus, the memory is only access once per MIO cycle and fails to anticipate accessing the unified memory a second time, during the instruction cycle associated with the fetched program instruction, with a data access, as set forth by independent claim 1.

In summary, with respect to independent claim 1, Morley fails to teach (1) determining if the fetched program instruction would require three unified memory accesses during a single instruction cycle for proper execution of the fetched program instruction; (2) accessing the unified memory a first time, during the instruction cycle associated with the fetched program instruction, with a dummy access; and/or (3) accessing the unified memory a second time, during the instruction cycle associated with the fetched program instruction, with a data access.

B. Independent Claim 6

The Examiner alleges that Morley discloses accessing the unified memory a first time during the second instruction cycle with a dummy access when it is determined that the program instruction accessed for a second instruction cycle is a conditional program code discontinuity and points to column 58, lines 17-20, of Morley to support the allegation.

Contrary to the Examiner' position, this passage of Morley fails to discuss or disclose accessing the unified memory a first time during the second instruction cycle with a dummy access when it is determined that the program instruction accessed for a second instruction cycle is a conditional program code discontinuity, as set forth by independent claim 6. Column 58,

lines 17-20, of Morley merely teaches that the RAM may include a parallel I/O port. Column 58, lines 17-20, of Morley is void of any teachings directed to accessing the unified memory a first time during the second instruction cycle with a dummy access when it is determined that the program instruction accessed for a second instruction cycle is a conditional program code discontinuity, as set forth by independent claim 6.

Also, the Examiner alleges that Morley discloses accessing the unified memory a second time during the second instruction cycle to read a new instruction when it is determined the program instruction accessed for a second instruction cycle is a conditional program code discontinuity, thereby delaying the instruction access from the unified memory for the second instruction cycle by a half cycle and points to Figure 28 to support the allegation. With respect to Figure 28, the read operation illustrates that during the PH Φ of the MIO cycle, the data from the memory is accessed and place on the bus; during the PH1 of the MIO cycle, the data sits on the bus; and during the PH2 of the MIO cycle, the data on the bus is uploaded or read. Thus, the memory is only access once per MIO cycle and fails to anticipate accessing the unified memory a second time, during the instruction cycle associated with the fetched program instruction, with a data access, as set forth by independent claim 6.

In summary, with respect to independent claim 6, Morley fails to teach (1) accessing the unified memory a first time during the second instruction cycle with a dummy access when it is determined that the program instruction accessed for a second instruction cycle is a conditional program code discontinuity; and/or (2) accessing the unified memory a second time, during the instruction cycle associated with the fetched program instruction, with a data access.

C. Independent Claim 9

The Examiner alleges that Morley discloses accessing the unified memory a first time, during the instruction cycle associated with the fetched last instruction of loop, with a dummy access and points to column 58, lines 17-20, of Morley to support the allegation.

Contrary to the Examiner's position, this passage of Morley fails to discuss or disclose accessing the unified memory a first time, during the instruction cycle associated with the fetched last instruction of loop, with a dummy access, as set forth by independent claim 9. Column 58, lines 17-20, of Morley merely teaches that the RAM may include a parallel I/O port. Column 58, lines 17-20, of Morley is void of any teachings directed to accessing the unified memory a first time, during the instruction cycle associated with the fetched last instruction of loop, with a dummy access, as set forth by independent claim 9.

Moreover, the Examiner alleges that Morley discloses accessing the unified memory a second time, during the instruction cycle associated with the fetched last instruction of loop, with a data access and points to Figure 28 to support the allegation. With respect to Figure 28, the read operation illustrates that during the PH Φ of the MIO cycle, the data from the memory is accessed and placed on the bus; during the PH1 of the MIO cycle, the data sits on the bus; and during the PH2 of the MIO cycle, the data on the bus is uploaded or read. Thus, the memory is only accessed once per MIO cycle and fails to anticipate accessing the unified memory a second time, during the instruction cycle associated with the fetched program instruction, with a data access, as set forth by independent claim 9.

In summary, with respect to independent claim 9, Morley fails to teach (1) accessing the unified memory a first time, during the instruction cycle associated with the fetched last instruction of loop, with a dummy access; and/or (2) accessing the unified memory a second time, during the instruction cycle associated with the fetched program instruction, with a data access.

D. Independent Claim 13

The Examiner alleges that Morley discloses accessing the unified memory with a dummy access during execution of the last instruction of the loop and points to column 58, lines 17-20, of Morley to support the allegation.

Contrary to the Examiner's position, this passage of Morley fails to discuss or disclose accessing the unified memory with a dummy access during execution of the last instruction of the loop as set forth by independent claim 13. Column 58, lines 17-20, of Morley merely teaches

that the RAM may include a parallel I/O port. Column 58, lines 17-20, of Morley is void of any teachings directed to accessing the unified memory with a dummy access during execution of the last instruction of the loop, as set forth by independent claim 13.

Moreover, the Examiner alleges that Morley discloses accessing the unified memory, a second time, with a data access during execution of the last instruction of the loop and points to Figure 28 to support the allegation. With respect to Figure 28, the read operation illustrates that during the PH Φ of the MIO cycle, the data from the memory is accessed and placed on the bus; during the PH1 of the MIO cycle, the data sits on the bus; and during the PH2 of the MIO cycle, the data on the bus is uploaded or read. Thus, the memory is only accessed once per MIO cycle and fails to anticipate accessing the unified memory, a second time, with a data access during execution of the last instruction of the loop, as set forth by independent claim 13.

In summary, with respect to independent claim 13, Morley fails to teach (1) accessing the unified memory with a dummy access during execution of the last instruction of the loop; and/or (2) accessing the unified memory, a second time, with a data access during execution of the last instruction of the loop.

Accordingly, in view of all the reasons set forth above, the Pre-Appeal Brief Conference Panel is respectfully requested to reconsider and instruct the Examiner to withdraw the present rejection under 35 U.S.C. §103.

Respectfully submitted,



Matthew E. Connors
Registration No. 33,298
Gauthier & Connors LLP
225 Franklin Street, Suite 2300
Boston, Massachusetts 02110
Telephone: (617) 426-9180
Extension 112

MEC/MJN/mjn